\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* NCR ID: ECSed38372 Status: VERIFIED Submitted: 030926 Enclosures: 7 Project: OPS\_HEG NCR Class: OPERATIONS NCR TITLE... Datapool HEG may be using wrong sphere for MODIS Datasets PROBLEM INFORMATION... COST ANALYSIS INFORMATION... Build Name[\*]: Drop 6A.08+
Test Site[\*]: EDC DAAC
Detection Method[\*]: Customer Use
Detected-In-Phase[\*]: DAAC Activity Cost[\*]: MEDIUM Estimated Fix Time(hrs): 80 Estimated Fix Date(yymmdd): 040109 Est Num\_SLOC: 25 Test Case ID: Revised Fix Time (Hrs): 80 Machine Name: Revised Fix Date (yymmdd): 040109 Severity (1=Showstopper)[\*]: 2 Priority: 014 Priority Date: 200310 TO BE FIXED INFORMATION... Problem type[\*]: source code High Priority: 004 Mode [\*]: TS1 Recommended change[\*]: source code Trouble Ticket: SMC000000006086
DAAC Trouble Ticket: EDC000000014108
Submitter: evans Implement Due Date (yymmdd): 040109 Eng SW Release Name: TBD Eng SW Release Date (yymmdd): Quality of NCR: 1 ANALYSIS INFORMATION... Workaround Available? N Evaluate Engineer: kcarr Assigned To: cpradera Analysis Due Date(yymmdd): 031107 Page 1/2 NCR Class: OPERATIONS Project: OPS\_HEG MERGE INFORMATION.. VERIFICATION INFORMATION... Resolution[\*]: source code Resolved by: cpradera Test Engineer: cpradera Verification Due: Iteration: Drop\_6A.08 Verification results(P/F)?: P Elapsed verification time (hrs): 1 Indicate\_SLOC[\*]: Added Attachments (Y/N)? N Num\_SLOC: 2 Fixing time (hrs): 80 Affect CSCI: HEG Ver. Build ID[\*]: Drop 6A.08+ Verification Machine: f3ins01 Merge Build Id: M040108004 Documentation affected (Y/N)? N Verification Site[\*]: EDF Fix Date (yymmdd): 040109 Patch Release Name: TBD Patch Release Date (yymmdd): TE SW Release Name: TBD TE SW Release Date (yymmdd):

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\*\*\*\*\*\* Problem (Added 030926 by ocoates) \*\*\*\*\*\* Please describe the problem you are experiencing below, including what you did, what you expected to happen, and what actually happened:

A discrepancy was notices while reviewing the datapool resample log. In the Input image and reprojection info: the correct sphere

6371007.18 is reported. However in the SINUSOIDAL PROJECTION PARAMETERS:

the incorrect 6370997.000000 is reported. We are unsure which value

being used to project the data. Below are the sections from the resample.log. We will continue to investigate this problem.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Input image and reprojection info input\_filename: /datapool/TS1/user/MOLT/MOD09A1.004/2003.06.26//MOD09A1.A2003177.h11v05.004. 2003194092334.hdf output\_filename: /datapool/TS1/user/downloads/00000000000000078/MOD09A1\_A2003177\_h11\_MOD\_Grid\_500m\_Surface\_Reflectance\_sur\_ refl\_b01\_85\_1.tif MOD\_Grid\_500m\_Surface\_Reflectance object\_name: field\_name: sur\_refl\_b01 input\_filetype: HDF-EOS output\_filetype: **GEOTIFF** input\_projection\_type: SIN output\_projection\_type:
output\_zone\_code: UTM 0 output\_ellipsoid: WGS84 resampling\_type: NN 6371007.18 0.00 0.00 0.00 0.00 0.00 input projection parameters: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 output projection parameters: -80.33 35.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 \* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\* SINUSOIDAL PROJECTION PARAMETERS: Radius of Sphere: 6370997.000000 meters Longitude of Center: 0.000000 degrees 0.000000 meters False Easting: 0.000000 meters False Northing: UNIVERSAL TRANSVERSE MERCATOR (UTM) PROJECTION PARAMETERS: 17 zone: Semi-Major Axis of Ellipsoid: Semi-Minor Axis of Ellipsoid: 6378137.000000 meters 6356752.314245 meters Trouble Tickets (Status Report) Scale Factor at C. Meridian: Longitude of Central Meridian: 0.999600 -81.000000 degrees \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

```
04-0092_ncrs
*****************
   LP DAAC POC's: Gayla Evans 605.594.6523 gevans@usgs.gov and
Carolyn
  Gacke 605.594.6822 cgacke@usgs.gov
  Note: Gayla will be out the rest of this week (Thurs & Fri).
   Cid Prideras is aware of the problem.
Detailed Resolution Log:
Submitter ID : evans
Submitter Impact : Medium
Submitter Name : Gayla Evans
Submitter Phone : 605-594-6523
Submitter eMail : gevans@usgs.gov
Closing Code:
Related CCR:
****** Updated Info & Impact Statement (Added 031017 by burck) ********
Could you update the TT EDC14108 / ECSed38372 with the following
information and impact statement?
Thanks,
Gayla
Carolyn talked with Gail Schmidt, MRT developer, who corrected this
problem in the MRT code, after the code was delivered to the HEG group
july 2001.
I found this note in the MRT Release Notes:
Version 3.0 (December 2002)
       The previous versions of the MRT were not able to handle sphere
13.
radius values other than 6370997.0 (radius of sphere 19) for sphere-
based projections while implementing datum conversions. This was hard-
coded in GCTP. Version 3.0 of the MRT will support 6371007.181 as a
sphere radius value in the MODIS Sinusoidal data.
IMPACT: No DP-HEG MODIS datasets can be released until the fix is in
place.
```

Gayla Evans
Science Software Engineer
Science Application International Corporation(SAIC)
USGS/EROS Data Center
Sioux Falls, SD 57198
Phone: 605-594-6523
gevans@usgs.gov

12/12/03: Completed coding. Waiting for ToolKit coding changes (NCR 38771).
Will be included in the Jan Heg patch.

\*\*\*\*\*\* Analysis (Added 031212 by cpradera) \*\*\*\*\*\* Please describe your Analysis: Fri Dec 12 18:30:59 EST 2003 The program "resample" does not use the correct datum. The program resample does not use the correct datum.

It defaults to the standard sphere rather than use the MODIS sphere. The GCTP library does not allow use of the MODIS sphere and it will need modifications. Once the GCTP library is modified, then the "resample" code can be modified to refer to the correct datum (MODIS sphere).

The "resample" code has a complicated arrangement of calling the GCTP library so it will have to be traced carefully. the GCTP library, so it will have to be traced carefully to make sure there is not some unusual side effects that occur once the default setting is changed. Cid Praderas \*\*\*\*\*\* Resolution (Added 040112 by cpradera) \*\*\*\*\*\*\* Please describe your resolution to this problem: Mon Jan 12 14:25:32 EST 2004 The MODIS datum code was passed to the GCTP library instead of the default sphere code. Cid Praderas \*\*\*\*\*\* Previous Merge Build IDs (Added 040112 by cpradera) \*\*\*\*\*\*\*\* Please enter any related Merge Build ID(s) information: 1)M040108003 2)M040108004 3) 4) \*\*\*\*\*\*\* Verification (Added 040208 by jcorbett) \*\*\*\*\*\*\*\*
Please describe your verification:
Ran MOD10A1.004 ganules with HEG. Resample log lists Radius of Sphere = 6371007.181000 in DEV04 runs #128, 129 and 138.

```
****** History *******
 xddts 030926 151348 Submitted to OPS_HEG by ocoates
xddts 030926 151423 Enclosure "Problem" added by ocoates
xddts 030926 151425 Fields modified by ocoates
xddts 030929 153223 Fields modified by ocoates
batchbug 031008 014809 Priority changed to 35 by ddts
batchbug 031015 113446 Priority changed to 32 by ddts
batchbug 031015 123846 Priority changed to 35 by ddts
webddts 031017 140231 Enclosure "Updated Info & Impact Statement" added by burck
webddts 031017 140231 Enclosure "Updated Info & Impact Statement" batchbug 031022 174346 Priority changed to 70 by ddts batchbug 031029 182302 Priority changed to 23 by ddts xddts 031029 190207 Enclosure "IPT HISTORY" added by ddts xddts 031031 154447 N -> A (Assign-Eval to cpradera) by kcarr xddts 031013 102131 Enclosure "IPT" edited by cpradera batchbug 031106 082040 Priority changed to 21 by ddts xddts 031110 135522 Enclosure "IPT" edited by kcarr xddts 031110 135522 Enclosure "IPT" edited by jsmith-c batchbug 031112 165857 Priority changed to 15 by ddts xddts 031121 135628 Enclosure "IPT" edited by kcarr xddts 031123 203223 Fields modified by jsmith-c batchbug 03123 203223 Fields modified by jsmith-c batchbug 03123 203607 Enclosure "IPT" edited by jsmith-c batchbug 03123 203607 Enclosure "IPT" edited by jsmith-c batchbug 031221 184527 Enclosure "IPT" edited by jsmith-c batchbug 03123 215633 Priority changed to 9 by ddts xddts 03123 203607 Enclosure "IPT" edited by jsmith-c batchbug 031212 184527 Enclosure "IPT" edited by jsmith-c batchbug 031212 184527 Enclosure "IPT" edited by cpradera xddts 031212 184527 Enclosure "IPT" edited by cpradera xddts 031212 184527 Enclosure "IPT" edited by cpradera xddts 031213 175308 Enclosure "IPT" edited by cpradera xddts 031213 175308 Enclosure "IPT" edited by cpradera batchbug 040108 201456 Priority changed to 4 by ddts xddts 040108 132446 B -> R (Assign-Implement) by cpradera batchbug 040108 201456 Priority changed to 15 by ddts xddts 040108 132446 B -> R (Assign-Implement) by cpradera batchbug 040108 201456 Priority changed to 15 by ddts xddts 040112 142711 Enclosure Resolution added by cpradera xddts 040112 142711 Enclosure Previous Merge Build IDs added by
 xddts 040108 201456 Priority Changed to 15 by ddts
xddts 040112 142711 Enclosure Resolution added by cpradera
xddts 040112 142736 Enclosure Previous Merge Build IDs added by cpradera
xddts 040112 142736 R -> M (Merged) by cpradera
batchbug 040115 204202 Priority changed to 14 by ddts
xddts 040116 122641 Enclosure "IPT" edited by kcarr
xddts 040116 131225 M -> T (In-Test) by cpradera
webddts 040208 133032 Enclosure "Verification" added by jcorbett
webddts 040208 133032 T -> V (Verified) by jcorbett
  П
   ********************
  NCR ID: ECSed38637
                                                                                                                          Status: VERIFIED
                                                                                                                                                                                                                                                                             Submitted: 031030
                                                                                                                      Project: OPS_HEG
  NCR Class: OPERATIONS
                                                                                                                                                                                                                                                                            Enclosures: 6
  NCR TITLE...
           DP-HEG: Need to produce external metadata file for Tiff output
  PROBLEM INFORMATION...
                                                                                                                                                                                            COST ANALYSIS INFORMATION...
           Build Name[*]: Drop 6A.08
Test Site[*]: EDC DAAC
                                                                                                                                                                                                      Cost[*]: LOW
                                                                                                                                                                                                      Estimated Fix Time(hrs): 80
           Detection Method[*]: Customer Use Detected-In-Phase[*]: DAAC Activity
                                                                                                                                                                                                      Estimated Fix Date(yymmdd): 031231
```

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Test Case ID:

Machine Name:

Est Num\_SLOC: 500

Revised Fix Time (Hrs): 80

Revised Fix Date (yymmdd): 040109

Severity (1=Showstopper)[\*]: 5 Priority: 012 Priority Date: 031105 High Priority: 012 Mode [\*]: OPS Trouble Ticket: SMC000000006226
DAAC Trouble Ticket: EDC000000014217
Submitter: evans

ANALYSIS INFORMATION.. Evaluate Engineer: kcarr ataaheri Assigned To:

Analysis Due Date(yymmdd): 031205

TO BE FIXED INFORMATION... Problem type[\*]: source code Recommended change[\*]: source code Implement Due Date (yymmdd): Eng SW Release Name: TBD Eng SW Release Date (yymmdd): Quality of NCR: 4 Workaround Available? N

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NCR Class: OPERATIONS Project: OPS\_HEG

MERGE INFORMATION..

Resolution[\*]: source code Resolved by: ataaheri Iteration: Drop 6A.08+

Indicate\_SLOC[\*]: Combination

Num\_SLOC: 542

Fixing time (hrs): 80
Affect CSCI: HEG
Merge Build Id: M031224002
Documentation affected (Y/N)? N Fix Date (yymmdd): 031224 Patch Release Name: TBD Patch Release Date (yymmdd): TE SW Release Name: TBD

TE SW Release Date (yymmdd):

VERIFICATION INFORMATION... Test Engineer: ataaheri Verification Due:

Verification results(P/F)?: P Elapsed verification time (hrs): 1

Attachments (Y/N)? N

Ver. Build ID[\*]: Drop 6A.08+ Verification Machine: f3ins01 Verification Site[\*]: EDF

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Long Description:

The DP-HEG TIFF format has two metadata issues.

- The internal TIFF tags must accurately describe the output data 1. produced.
- The accompanying met files must accurately describe the output data produ

ced and be consistent with the TIFF tags.

The GeoTiff files need to be accompanied either by an output xml or a metadata file, which carries along information that is valuable to the end-user. This could either be one file for the whole data set or one file for

every band of GeoTiff. (For example, Landsat-7 uses one metadata file, which

contains general acquisition information, sensor specific information, and also

band specific information.)

GENERAL INFORMATION NEEDED:

The following attributes and their values (that can be extracted from

the xml file) need to be added: CalendarDate(ASTER), TimeOfDay(ASTER), RangeBeg

inningDate(MODIS), RangeBeginningTime(MODIS), RangeEndingDate(MODIS), RangeEndi

ngTime(MODIS), ASTERMapOrientationAngle,

Solar\_Elevation\_Angle, Solar\_Azimuth\_Angle, ASTERVNIRPointingAngle, Page 6

**ASTERSWIRPO** 

intingAngle, and ASTERTIRPointingAngle.

- Output projection, output projection parameters, resampling method and the datum are needed.
  - The output Zone is needed for the UTM projection.

SENSOR-SPECIFIC REQUIREMENTS NEEDED:

• Output Corner Coordinates, output lines and samples, resampling method and output pixel size are needed. In the case of ASTER, these would nee

d to be specific for each sensor: VNIR, SWIR, and TIR.

The output directory presently contains an xml file, which is carried over from

the input HDF data. The essential metadata, described above needs to be pulle

be pulle d from this file and subsequently, it needs to be removed since it references t

he old projection information.

IMPACT: The LPDAAC considers this an essential pre-requisite (i.e. show-stopper

) before any of the MODIS or ASTER data sets are released through the Data Pool HEG.

LP DAAC POC: Gayla Evans ocoates 10/29/03 12:14:01 Ticket deferred - THurs., 10/30/03 - Being reviewed by Kathy Carr. << end of description >>

SUBMITTER INFO:

Submitter Name: Gayla Evans Submitter Email: gevans@usgs.gov Submitter Phone: 605-594-6523

\*\*\*\*\*\* Analysis (Added 031202 by ataaheri) \*\*\*\*\*\*\*\*
Please describe your Analysis:

Currently only when HDFEOS output file is requested we create \*.met file. We shall need to modify the code so that when tif output file is requested, we force the tools to write metadata to intermediate hdfeos files, thus creating \*.met file.

\*\*\*\*\*\* Resolution (Added 040106 by ataaheri) \*\*\*\*\*\*\*\*
Please describe your resolution to this problem:

Modified all HEG tools (active in DAAC) tp produce a \*.met file when a Page 7

```
04-0092_ncrs
tiff output requested.
The files modified are:
/ecs/formal/HEG/data/MCF_file
/ecs/formal/HEG/gdtif/gdtif.c
/ecs/formal/HEG/gdtif/gdtif.h
/ecs/formal/HEG/gdtif/write_metadata_gd.c
/ecs/formal/HEG/gridstitch/write_metadata.c
/ecs/formal/HEG/resample/src/addmeta.c
/ecs/formal/HEG/resample/src/main.c
/ecs/formal/HEG/resample/src/write_metadata.c
/ecs/formal/HEG/swtif/abe_swtif7.c
/ecs/formal/HEG/swtif/write_metadata.c
****** Previous Merge Build IDs (Added 040106 by ataaheri) *******
Please enter any related Merge Build ID(s) information:
1)M031224002
2)M031224003
3)
4)
****** ** ** Verification (Added 040209 by icorbett) *******
Please describe your verification:
Correct attributes for MISR, ASTER and MODIS data produced for tif.met
file. New NCR for ASTER. See 39280.
******* History ********
         1010629 000000 Submitted by Remedy via ddts@eos.hitc.com
bugs
```

```
04-0092_ncrs
batchbug 031216 151547 Priority changed to 12 by ddts
              031216 151547 Priority changed to 12 by ddts
031219 120432 Enclosure "IPT" edited by ataaheri
031222 143005 Enclosure "IPT" edited by jsmith-c
040105 124331 Fields modified by jsmith-c
040106 125037 Enclosure Resolution added by ataaheri
040106 125102 Enclosure Previous Merge Build IDs added by ataaheri
040106 125102 R -> M (Merged) by ataaheri
040106 125111 M -> T (In-Test) by ataaheri
040116 100609 Fields modified by srice
xddts
xddts
xddts
xddts
xddts
xddts
xddts
xddts 040116 100609 Fields modified by srice webddts 040209 172724 Enclosure "Verification" added by jcorbett webddts 040209 172724 T -> V (Verified) by jcorbett
П
**************************
                                                                                                Submitted: 031031
NCR ID: ECSed38650
                                           Status: VERIFIED
NCR Class: OPERATIONS
                                           Project: OPS_DPool
                                                                                                Enclosures: 8
NCR TITLE..
   Remove xml file from downloads directory or rename
PROBLEM INFORMATION...
                                                                   COST ANALYSIS INFORMATION...
   Build Name[*]: Drop 6A.08
                                                                       Cost[*]: LOW
   Test Site[*]: EDC DAAC
Detection Method[*]: Customer Use
Detected-In-Phase[*]: DAAC Activity
                                                                       Estimated Fix Time(hrs): 20
                                                                       Estimated Fix Date(yymmdd): 040109
                                                                      Est Num_SLOC: 30
Revised Fix Time (Hrs): 20
Revised Fix Date (yymmdd): 040109
   Test Case ID: Machine Name:
   Severity (1=Showstopper)[*]: 5
Priority: 007 Priority Date: 200311
High Priority: 007 Mode [*]: OPS
Trouble Ticket: SMC00000006222
                                                                   TO BE FIXED INFORMATION...
                                                                       Problem type[*]: source code
                                                                       Recommended change[*]: source code
                                                                       Implement Due Date (yymmdd): 040109
   DAAC Trouble Ticket: EDC00000014158
                                                                       Eng SW Release Name: TBD
                                                                       Eng SW Release Date (yymmdd):
   Submitter:
                     evans
ANALYSIS INFORMATION...
                                                                       Quality of NCR: 4
   Evaluate Engineer: kcarr
Assigned To: dkang
                                                                       Workaround Available? N
   Analysis Due Date(yymmdd): 031231
                                                                                                                    Page 1/2
NCR Class: OPERATIONS
                                           Project: OPS_DPool
                                                                                                Forwarded 031114
MERGE INFORMATION..
                                                                   VERIFICATION INFORMATION...
   Resolution[*]: source code
                                                                       Test Engineer: dkang
   Resolved by: dkang
                                                                       Verification Due:
   Iteration: Drop 6A.08+
Indicate_SLOC[*]: Added
Num_SLOC: 12
Fixing time (hrs): 15
Affect CSCI: DPL
Merge Build Id: M040107003
                                                                       Verification results(P/F)?: P Elapsed verification time (hrs): 1
                                                                      Attachments (Y/N)? Y
Ver. Build ID[*]: Drop 7
Verification Machine: p2dps01
Verification Site[*]: PVC
   Documentation affected (Y/N)? N
   Fix Date (yymmdd): 040108
   Patch Release Name: TBD
Patch Release Date (yymmdd):
TE SW Release Name: TBD
TE SW Release Date (yymmdd):
FORWARDING INFORMATION...
   Old class: OPERATIONS
   Old project: OPS_HEG
```

Forwarded by: Kathleen Carr

\*\*\*\*\*\*\* Problem (Modified 031031 by ocoates) \*\*\*\*\*\*\*\*
Long Description :

Long Description: The DP-HEG HDF-EOS format has various metadata issues.

- 1. The embedded metadata must accurately describe the output data produced.
- 2. The accompanying met files must accurately describe the output data produced and be consistent with the embedded metadata.

The output directory contains an xml file, which is carried over from input HDF

data. This file needs to be removed since it references the old information.

## CHANGES TO THE EMBEDDED METADATA

- Output pixel size and resampling method must be specified.
- In the Geographic HDF embedded metadata, the "UpperLeft" and "LowerRight" coordinates units are specified as "Mtrs" (meters) instead of

Degrees/Minutes/Seconds (DMS).

"Projection=GCTP\_GEO\n"

The DMS format is easily confused with meters and decimal degrees since it has no space between fields and the seconds are carried out to the dec

imal place. The attribute must reflect the correct units of the coordinates to avoid end-user confusion.

• The following attributes and their values (that can be extracted from

the xml file) need to be added: ASTERMapOrientationAngle, Solar\_Elevation\_Angle, Solar\_Azimuth\_Angle, ASTERVNIRPointingAngle, ASTERSWIRPointingAngle, and ASTERTIRPointingAngle.

### CHANGES REQUIRED IN THE METADATA FILE

- Output pixel size should be specified for all projections, including Geographic.
  - Output projection should be added.
  - Output projection parameters should be added.
- $\bullet$  Output UpperLeftPointMtrs and LowerRightMtrs needs to be added. The attr

ibute name should reflect the DMS units for the Geographic projection.

- Resampling method should be added.
- $\bullet$  Output lines and samples need to be added. These can be extracted from t

he embedded metadata as XDim and YDim.

• The following attributes and their values (that can be extracted from

the xml file) need to be added: ASTERMapOrientationAngle,

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Solar\_Elevation\_Angle, Solar\_Azimuth\_Angle, ASTERVNIRPointingAngle, ASTERSWIRPointingAngle, and ASTERTIRPointingAngle.

IMPACT: The LPDAAC considers this an essential pre-requisite (i.e. show stoppe

r) before any of the MODIS or ASTER data sets are released through the Data Poo l HEG.

LP DAAC POC: Gayla Evans ocoates 10/29/03 11:53:07 Ticket deferred - Thurs., 10/30/03 - Being reviewed by Kathy Carr. ocoates 10/30/03 13:54:44 Ticket deferred - Fri., 10/31/03 << end of description >>

SUBMITTER INFO:

Submitter Phone: 605-594-6523 Submitter Email: gevans@usgs.gov Submitter Name: Gayla Evans

\*\*\*\*\*\*\* Initial Analysis (Modified 031121 by kcarr) \*\*\*\*\*\*\*\*\* 11/21/03: NOTE: This fix will apply to both HDF-EOS output and GeoTiff output.

10/31/03: Cannot remove the xml file from the downloads directory unless NCR 38649 is fixed, because the xml file is currently the only source of some metadata info for user. If the xml file is ultimately removed from the downloads directory, this would need to be approved by all DAACs.

Alternative is to rename the xml file in a way that makes it clear to the user that it contains metadata associated with the input file, not the output file.

\*\*\*\*\*\*\*\*\*\* IPT (Modified 040108 by dstepp) \*\*\*\*\*\*\*\*\*

1/5/04; TE REQUESTED. DAACS have agreed to rename the file. New naming convention will be <filename>.input.xml. 12/22/03: DAACS responded w/preference to rename the file rather than remove it. Will determine renaming convention w/ LPDAAC & review it with all DAACS.

\*\*\*\*\*\* Analysis (Modified 040106 by kcarr) \*\*\*\*\*\*\*\*
Please describe your Analysis:

Need to get agreement from all DAACs on whether to rename the xml file or remove it entirely.

DAACs have agreed to rename the file.

New naming convention will be <filename>.input.xml

\*\*\*\*\*\* ipt\_history (Added 031222 by jsmith-c) \*\*\*\*\*\*\* 12/22/03: DAACs have responded with preference to rename the file rather than remove it. Will determine renaming convention with LPDAAC and review it with all DAACs.

12/15/03: Soliciting input from all DAACs regarding the options of renaming the input xml file or removing this file from /downloads directory. (e.g., some end users may be using it). Implementation of solution is planned for the January HEG patch.

11/10/03: TE REQUESTED. Since additional attributes are included in the MCF (NCR 38649), the xml can be removed. Planned for January HEG patch.

\*\*\*\*\*\* Resolution (Added 040109 by dkang) \*\*\*\*\*\*\* Please describe your resolution to this problem:

DPL webaccess packager calls a packaging utility to pack the order data. I modified the packager to pass an new argument to tell the utility script if the order is a HEG order. In the script, I modified the code to add the ".input" string for the metadata filename of the HEG order.

\*\*\*\*\*\* Previous Merge Build IDs (Added 040109 by dkang) \*\*\*\*\*\*\* Please enter any related Merge Build ID(s) information:

- 1) M040107003
- 2) M040107004
- 3)
- 4)

\*\*\*\*\* verification (Added 040204 by idey) \*\*\*\*\*\*\* Invoked Web access GUI in TS2 mode and ordered Data Set MOD43B1.4

First time ordered withoug HEG coversion and saw that there is datafile and no .input.xml file in the directory. Second time ordered using HEG conversion and found file MOD43B1.A2003001.h32v08.004.2003024020131.hdf.input.xml

This veirfies the ncr that it creates .input.xml file for HEG conversion request orders

\*\*\*\*\*\*\* History \*\*\*\*\*\*\*\*

1010629 000000 Submitted by Remedy via ddts@eos.hitc.com buas

xddts

031031 133728 Fields modified by ocoates 031031 133922 Enclosure "Problem" edited by ocoates xddts

```
031031 154951 Fields modified by kcarr
031031 155256 Enclosure "Initial Analysis" added by kcarr
 xddts
 xddts
 batchbug 031106 082104 Priority changed to 23 by ddts

xddts 031106 083907 Enclosure "IPT" added by dstepp

xddts 031110 092129 Enclosure "IPT" edited by kcarr

xddts 031110 125234 Enclosure "IPT" edited by jsmith-c

xddts 031110 125357 N -> A (Assign-Eval to kcarr) by jsmith-c

batchbug 031112 170115 Priority changed to 26 by ddts
batchbug 031114 170115 Priority changed to 26 by ddts

xddts 031114 091551 Forwarded from OPS_HEG to OPS_DPool by kcarr

batchbug 031119 190056 Priority changed to 19 by ddts

xddts 031121 112153 Enclosure "Initial Analysis" edited by kcarr

batchbug 031203 215740 Priority changed to 14 by ddts

xddts 031207 182247 Fields modified by jsmith-c

xddts 031207 182511 Enclosure "IPT" edited by jsmith-c

xddts 031207 183001 Enclosure "IPT" edited by jsmith-c

xddts 031207 183330 Enclosure "IPT" edited by jsmith-c

xddts 031208 124848 Enclosure "IPT" edited by kcarr

batchbug 031210 195248 Priority changed to 13 by ddts

xddts 031215 095145 Enclosure "IPT" edited by kcarr

xddts 031215 095928 Enclosure "Analysis" added by kcarr

xddts 031215 095928 A -> B (Cost-Analyzed) by kcarr

batchbug 031216 151524 Priority changed to 10 by ddts

xddts 031222 142903 Enclosure "IPT" edited by kcarr

xddts 031222 142903 Enclosure "IPT" edited by kcarr

xddts 031222 142903 Enclosure "IPT" edited by kcarr

xddts 031222 142901 Enclosure "IPT" edited by kcarr

xddts 040106 114223 Enclosure "IPT" edited by kcarr

xddts 040106 114223 Enclosure "Analysis" edited by kcarr

xddts 040106 114223 Enclosure "Analysis" edited by kcarr

xddts 040106 114223 Fields modified by kcarr

xddts 040108 201321 Priority changed to 7 by ddts

xddts 040108 201321 Priority changed to 7 by ddts

xddts 040108 201321 Priority changed to 7 by ddts

xddts 040108 201321 Priority changed to 7 by ddts

xddts 040108 201321 Priority changed to 7 by ddts

xddts 040108 201325 Enclosure "IPT" edited by dstepp

xddts 040109 102548 Enclosure Resolution added by dkang

xddts 040109 102607 Enclosure Previous Merge Build IDs added by ddts

xddts 040109 102607 Enclosure Previous Merge Build IDs added by ddts

xddts 040109 102608 R -> M (Merged) by dkang

xddts 040109 103019 M -> T (III-Test) by dkang
                            031114 091551 Forwarded from OPS_HEG to OPS_DPool by kcarr
                            040109 102608 R -> M (Merged) by dkang
 xddts
                            040109 103019 M -> T (In-Test) by dkang 040109 103040 T -> T (In-Test) by dkang
 xddts
 xddts
                            040204 171310 Enclosure "Verification" added by idey
 xddts
                            040204 171311 T -> V (Verified) by idey
 xddts
 П
  ********************
 NCR ID: ECSed38651
                                                                                 Status: VERIFIED
                                                                                                                                                                                  Submitted: 031031
 NCR Class: OPERATIONS
                                                                                Project: OPS_HEG
                                                                                                                                                                                  Enclosures: 8
 NCR TITLE...
       Change formats from HDF to GeoTiff w/o A Projection Conversion for ASTER
 PROBLEM INFORMATION...
                                                                                                                             COST ANALYSIS INFORMATION...
       Build Name[*]: Drop 6A.08
                                                                                                                                   Cost[*]: MEDIUM
       Test Site[*]: EDC DAAC
Detection Method[*]: Customer Use
Detected-In-Phase[*]: DAAC Activity
                                                                                                                                   Estimated Fix Time(hrs): 80
                                                                                                                                   Estimated Fix Date(yymmdd): 040109
                                                                                                                                   Est Num_SLOC: 100
Revised Fix Time (Hrs): 80
Revised Fix Date (yymmdd): 040126
       Test Case ID:
Machine Name:
       Severity (1=Showstopper)[*]: 5
Priority: 007 Priority Date: 200311
High Priority: 007 Mode [*]: 0PS
                                                                                                                             TO BE FIXED INFORMATION...
                                                                                                                                   Problem type[*]: source code
                                                                                                                                   Recommended change[*]: source code
       Trouble Ticket: SMC000000006225
                                                                                                                                   Implement Due Date (yymmdd): 040127
                                                                                                                   Page 13
```

DAAC Trouble Ticket: EDC000000014216
Submitter: evans
ANALYSIS INFORMATION...
Evaluate Engineer: kcarr

Eng SW Release Name: TBD
Eng SW Release Date (yymmdd):
Quality of NCR: 1
Workaround Available? N

Assigned To: cpradera

Analysis Due Date(yymmdd): 031201 Page 1/2

NCR Class: OPERATIONS Project: OPS\_HEG

MERGE INFORMATION..
Resolution[\*]: source code
Resolved by: cpradera
Iteration: Drop 6A.08
Indicate\_SLOC[\*]: Added
Num\_SLOC: 1039

Fixing time (hrs): 120 Affect CSCI: HEG

Merge Build Id: M040127007 Documentation affected (Y/N)? N

Fix Date (yymmdd): 040127
Patch Release Name: TBD
Patch Release Date (yymmdd):
TE SW Release Name: TBD
TE SW Release Date (yymmdd):

VERIFICATION INFORMATION...
Test Engineer: cpradera
Verification Due:
Verification results(P/F)?: P
Elapsed verification time (hrs): 1
Attachments (Y/N)? N

Ver. Build ID[\*]: Drop 6A.08+ Verification Machine: f3ins01 Verification Site[\*]: EDF

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\*\*\*\*\*\* Problem (Modified 031031 by ocoates) \*\*\*\*\*\*\*

Long Description:

DP-HEG: needs to provide an option for a format change from HDF to GeoTiff with

out a projection conversion.

The  $\dot{\text{DP}}\text{-HEG}$  needs to provide an option to change formats from HDF to GeoTiff wi

thout doing a projection conversion. This would take the original HDF file, se

parate the images into individual bands, and generate a GeoTiff for each band.

In the case of ASTER, the output created would be a Path-Oriented UTM image in

GeoTiff format. This image would be exactly like the HDF image except that it

is in separate bands and in GeoTiff format. This is important for both MODIS an

d ASTER end-users. This would allow end-user to work with data in the original

projection but with the convenience of the GeoTiff format. This would also el

iminate the need to resample the data again.

Since the output ASTER scenes will be Path-Oriented, it is important to make available the Latitudes and Longitude values from the Geometric Correction Table (GCT) for each of the telescopes (VNIR, SWIR, TIR). These can

be dumped to ASCII files, and need to be made available as accompanying inform ation to the GeoTiff files.

IMPACT: The LPDAAC considers this an essential pre-requisite (i.e. Page 14

show-stoppe
r) before any of the MODIS or ASTER data sets are released through the Data Poo
l HEG.

LP DAAC POC: Gayla Evans ocoates 10/29/03 12:13:26 Ticket deferred - Thurs., 10/30/03 - Being reviewed by Kathy Carr. ocoates 10/30/03 13:55:44 Ticket deferred - Fri., 10/31/03 << end of description >>

SUBMITTER INFO:

Submitter Name: Gayla Evans Submitter Email: gevans@usgs.gov Submitter Phone: 605-594-6523

\*\*\*\*\*\*\*\*\* Initial Analysis (Modified 031031 by kcarr) \*\*\*\*\*\*\*\* 10/31/03: GeoTiff is gridded, so ASTER data needs to be gridded before converting to GeoTiff. However, we can grid it and leave it in its path-oriented 'UTM' state.

End user would choose 'GeoTiff UTM' for ASTER data. See related NCR 37721 (need to support UTM and PS for swath)

\*\*\*\*\*\* Analysis (Added 031212 by cpradera) \*\*\*\*\*\*\*\*
Please describe your Analysis:

Research the GeoTIFF specifications to see how a projection grid can be displayed at an angle. If this is possible, then work into the swtif code.
Cid Praderas

\*\*\*\*\*\*\*\*\* IPT\_HISTORY\ (Added 040128 by jsmith-c) \*\*\*\*\*\*\*\*\*\*\* 1/23/04: Current merge date is 1/26. Note that for the Jan. patch, no .met file will be produced for the ASTER swath GeoTiff output. This omission is documented in NCR 39242.

1/16/04: Current merge date is 1/23; still scheduled for Jan. patch. GUI pull-down option for 6A08 will be "GeoTiff No Reprojection" - this option applies to ASTER swath data only. EDC has asked the science team at JPL to answer some questions about the MapOrientationAngle - these answers are needed before final implementation.

12/12/03: Analysis continues. > 80 Hours. Will be in Jan Patch. Will separate HDF into individual bands, and generate a GeoTiff for each band. ASTER output would be Path-Oriented UTM. This is important for both MODIS & ASTER end-users.

\*\*\*\*\*\* Resolution (Added 040128 by cpradera) \*\*\*\*\*\*\*\*
Please describe your resolution to this problem:

Most of the swtif routine was affected to include the new functionality (adding a no projection GeoTIFF for ASTER SWATH data).

New routines and modifications include:

a) Create a routine to calculate the UTM grid rotation angle
 b) HEG Front End was modified to create a new parameter file
 and to take a new input from the Web Access Gui.

c) swtif routines were modified to handle new parameter file.

d) Write (to GeoTIFF) routines from a Swath were added. Normally routines only write from a Grid.

e) Add UTM GeoTIFF tags.

f) swtif was extensively modified internally. Many looping counters had to be modified.

\*\*\*\*\*\*\* Previous Merge Build IDs (Added 040128 by cpradera) \*\*\*\*\*\*\*\*
Please enter any related Merge Build ID(s) information:

- 1) M040127007
- 2) M040127011

3)

4)

\*\*\*\*\*\*\* Verification (Added 040209 by jcorbett) \*\*\*\*\*\*\*\*
Please describe your verification:

DEVO4. Tif output of no reprojection compaired in ENVI to original HDF input. Input and output files contain the same data but in different formats. See run #139.

\*\*\*\*\*\*\*\*\*\*\*\* History \*
bugs 1010629 000000 Submitted by Remedy via ddts@eos.hitc.com
xddts 031031 134531 Enclosure "Problem" edited by ocoates
xddts 031031 134535 Fields modified by ocoates
xddts 031031 134557 Fields modified by ocoates
xddts 031031 155805 Fields modified by kcarr
xddts 031031 160104 Enclosure "Initial Analysis" added by kcarr
xddts 031031 161113 Enclosure "Initial Analysis" edited by kcarr
batchbug 031106 081843 Priority changed to 11 by ddts
xddts 031106 083015 Enclosure "IPT" added by dstepp
xddts 031110 120737 Enclosure "IPT" edited by kcarr
Page 16

```
04-0092_ncrs
                            031110 132555 Enclosure "IPT" edited by jsmith-c 031110 134856 Enclosure "IPT" edited by jsmith-c
 xddts
 xddts
xddts 031110 134836 Encrosure IPI edited by Jsmith-C xddts 031114 115330 N -> A (Assign-Eval to cpradera) by kcarr xddts 031114 115430 Enclosure "IPT" edited by kcarr xddts 031117 134053 Enclosure "IPT" edited by aaljazra batchbug 031119 190107 Priority changed to 20 by ddts xddts 031123 210104 Fields modified by jsmith-c xddts 031123 210249 Fields modified by jsmith-c xddts 031123 210655 Enclosure "IPT" edited by jsmith-c batchbug 031203 215753 Priority changed to 15 by ddts
xddts 031123 210655 Enclosure "IPT" edited by jsmith-c batchbug 031203 215753 Priority changed to 15 by ddts xddts 031212 185407 Enclosure "Analysis" added by cpradera xddts 031212 185407 A -> B (Cost-Analyzed) by cpradera xddts 031212 185501 Enclosure "IPT" edited by cpradera xddts 031213 170911 Enclosure "IPT" edited by jsmith-c batchbug 031216 151812 Priority changed to 24 by ddts xddts 040108 132133 Fields modified by kcarr batchbug 040108 201442 Priority changed to 14 by ddts batchbug 040115 204140 Priority changed to 12 by ddts xddts 040116 122541 Enclosure "IPT" edited by kcarr xddts 040116 133021 Enclosure "IPT" edited by kcarr batchbug 040122 205117 Priority changed to 9 by ddts xddts 040123 114120 Fields modified by kcarr xddts 040123 115312 Enclosure "IPT" edited by kcarr xddts 040123 115312 Enclosure "IPT" edited by kcarr xddts 040127 162501 B -> R (Assign-Implement) by cpradera
xddts     040123 115312 Enclosure "IPT" edited by kcarr
xddts     040127 162501 B -> R (Assign-Implement) by cpradera
xddts     040128 104220 Enclosure "IPT_HISTORY"' added by jsmith-c
xddts     040128 104430 Enclosure "IPT" edited by jsmith-c
xddts     040128 125842 Enclosure Resolution added by cpradera
xddts     040128 125908 Enclosure Previous Merge Build IDs added by cpradera
xddts     040128 125909 R -> M (Merged) by cpradera
batchbug     040129 204510 Priority changed to 8 by ddts
xddts     040201 123529 Enclosure "IPT" edited by jsmith-c
batchbug     040204 183822 Priority changed to 7 by ddts
xddts     040209 105707 M -> T (In-Test) by cpradera
webddts     040209 183622 Enclosure "Verification" added by jcorbett
webddts     040209 183622 T -> V (Verified) by jcorbett
 **************************
 NCR ID: ECSed38771
                                                                                                                                                                                  Submitted: 031121
                                                                                 Status: VERIFIED
                                                                              Project: OPS_Toolkit
                                                                                                                                                                                  Enclosures: 7
 NCR Class: OPERATIONS
 NCR TITLE...
       GCTP Library needs to include MODIS sphere/datum
 PROBLEM INFORMATION...
                                                                                                                              COST ANALYSIS INFORMATION...
       Build Name[*]: Drop 6A.08+
Test Site[*]: EDC DAAC
                                                                                                                                    Cost[*]: MEDIUM
                                                                                                                                    Estimated Fix Time(hrs): 80
       Detection Method[*]: Customer Use
                                                                                                                                    Estimated Fix Date(yymmdd): 040109
       Detected-In-Phase[*]: Operability Test
                                                                                                                                    Est Num_SLOC: 0
                                                                                                                                    Revised Fix Time (Hrs): 80
       Test Case ID: n/a
      Machine Name: n/a
Severity (1=Showstopper)[*]: 2
Priority: 015 Priority Date: 200312
High Priority: 003 Mode [*]: TS1
                                                                                                                                    Revised Fix Date (yymmdd): 040109
                                                                                                                              TO BE FIXED INFORMATION...
                                                                                                                                    Problem type[*]: source code
Recommended change[*]: source code
Implement_Due Date (yymmdd):
       Trouble Ticket: SMC0000000006086
       DAAC Trouble Ticket:
                                                                                                                                    Eng SW Release Name: TBD
       Submitter: kcarr
                                                                                                                                    Eng SW Release Date (yymmdd):
```

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ANALYSIS INFORMATION...

Evaluate Engineer: kcarr

Assigned To: sni

Analysis Due Date(yymmdd): 031212

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NCR Class: OPERATIONS Project: OPS\_Toolkit

MERGE INFORMATION..

Resolution[\*]: source code

Resolved by: sni

Iteration: Drop 6A.08+

Indicate\_SLOC[\*]: Combination

Num\_SLOC: 563

Fixing time (hrs): 88
Affect CSCI: TOOLKIT
Merge Build Id: Mo40105005
Documentation affected (Y/N)? Y

Fix Date (yymmdd): 040109 Patch Release Name: TBD

Patch Release Date (yymmdd): TE SW Release Name: TBD

TE SW Release Date (yymmdd):

VERIFICATION INFORMATION...

Test Engineer: sni

Verification Due:

Quality of NCR: 4 Workaround Available? N

Verification results(P/F)?: P

Elapsed verification time (hrs): 1

Attachments (Y/N)? N Ver. Build ID[\*]: Drop 6A.08+ Verification Machine: f3ins01

Verification Site[\*]: EDF

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\*\*\*\*\*\* Problem (Modified 031121 by kcarr) \*\*\*\*\*\*\* Please describe the problem you are experiencing below, including what you did, what you expected to happen, and what actually happened:

In order to support HEG usage of the correct MODIS sphere/datum (see OPS\_HEG NCR 38372), the Toolkit GCTP libraries must be updated to include this sphere/datum.

Currently sphere 6370997.000000 is hardcoded in the GCTP libraries.

\*\*\*\*\*\* status (Modified 031212 by sni) \*\*\*\*\*\*\* GCTP code change and testing is on progress.

6A.08 version of toolkit and hdfeos need to add CEA projection code and MODIS sphere, testing will run upon both changes.

relB version of toolkit and hdfeos only need add MODIS sphere, testing only upon this change.

GCTP code fix been tested with hdfeos and toolkit test driver. The toolkit fix needs the test with HEG and MODID pge before merge.

\*\*\*\*\*\*\* IPT (Modified 031222 by sni) \*\*\*\*\*\*\* 12/8/03 Related to NCR 38372. Will be in the Jan HEG patch. 12/18/03 Completed coding and regression test. Will merge the fix with HEG NCR 38372.

\*\*\*\*\*\* Analysis (Modified 031215 by sni) \*\*\*\*\*\*\*\*
Please describe your Analysis:

GCTP code change has been tested with hdfeos and toolkit test driver in both relB and 6A.08 baseline.

The code fix has been handed to HEG and MODIS pge to test and comment.

Will need the feedback from HEG and MODIS PGEs before merge this NCR.

\*\*\*\*\*\*\* Resolution (Added 040106 by sni) \*\*\*\*\*\*\*\*
Please describe your resolution to this problem:

Toolkit GCTP library has been changed to support MODIS sphere ( related to NCR 39372, sphere 6371007.181).

The GCTP library fix has been applied to hdfeos, and toolkit.

\*\*\*\*\*\* Previous Merge Build IDs (Added 040106 by sni) \*\*\*\*\*\*\*
Please enter any related Merge Build ID(s) information:

- 1) M040105005 for 6A08
- 2) M040105003 for relB

3)

4)

\*\*\*\*\*\* Verification (Added 040209 by jcorbett) \*\*\*\*\*\*\*
Please describe your verification:

DEVO4. Correct MODIS spheroid value of 6371007.181 found in spheroid.txt file. MODIS conversions now refer to correct value for RADIUS of sphere in resample logs. Refer to verification of NCR 38772.

```
04-0092_ncrs
                    031207 182146 Enclosure "IPT" added by jsmith-c 031208 124730 Enclosure "IPT" edited by kcarr
 xddts
 xddts
batchbug 031210 195140 Priority changed to 7 by ddts xddts 031212 161257 Enclosure "status" edited by sni xddts 031213 164157 Enclosure "IPT" edited by jsmith-c xddts 031215 092007 Enclosure "testing status" added by xddts 031215 092408 Enclosure "Analysis" added by sni 231215 092408 Enclosure "Analysis" added by sni
                                                                                                            added by sni
                    031215 092408 A -> B (Cost-Analyzed) by sni
031215 092543 Enclosure "Analysis" edited by sni
 xddts
xddts 031215 092543 Enclosure "Analysis" edited by sni xddts 031215 092606 Enclosure "testing status" deleted by sni xddts 031215 092817 Enclosure "Analysis" edited by sni xddts 031215 092851 Enclosure "Analysis" edited by sni batchbug 031216 151350 Priority changed to 3 by ddts xddts 031218 142627 Fields modified by sni xddts 031218 143026 Enclosure "IPT" edited by sni xddts 031218 143026 Enclosure "IPT" edited by sni xddts 031218 143227 Enclosure "IPT" edited by sni xddts 031218 143343 Fields modified by sni xddts 031222 092639 Enclosure "IPT" edited by sni xddts 040105 140404 B -> R (Assign-Implement) by sni xddts 040106 125845 Enclosure Resolution added by sni xddts 040106 130038 Enclosure Previous Merge Build IDs added by sni xddts 040106 130038 Enclosure Previous Merge Build IDs added by sni xddts 040106 130038 R -> M (Merged) by sni batchbug 040108 201510 Priority changed to 16 by ddts batchbug 040115 204214 Priority changed to 15 by ddts xddts 040120 091648 M -> M (Merged) by sni xddts 040120 091648 M -> M (Merged) by sni xddts 040120 091717 M -> T (In-Test) by sni
 xddts
                   040120 091717 M -> T (In-Test) by sni
040126 163712 Fields modified by srice
040209 102532 Enclosure "Verification" added by jcorbett
040209 102533 T -> V (Verified) by jcorbett
 xddts
 xddts
 webddts
 webddts
 П
 *****************
 NCR ID: ECSed39004
                                                           Status: CLOSED
                                                                                                                                  Submitted: 040106
                                                           Project: OPS_DPool
                                                                                                                                  Enclosures: 7
 NCR Class: OPERATIONS
 NCR TITLE..
     6A.08+ TS1. Can't populate DataPool with version 196 data.
 PROBLEM INFORMATION...
                                                                                           COST ANALYSIS INFORMATION...
     Build Name[*]: Drop 6A.08
                                                                                                Cost[*]: LOW
     Test Site[*]: NSIDC DAAC
                                                                                                Estimated Fix Time(hrs): 2
     Detection Method[*]: Customer Use Detected-In-Phase[*]: DAAC Activity
                                                                                                Estimated Fix Date(yymmdd): 040108
                                                                                                Est Num_SLOC: 20
Revised Fix Time (Hrs): 2
     Test Case ID: Machine Name:
                                                                                                Revised Fix Date (yymmdd): 040108
     Severity (1=Showstopper)[*]: 2
Priority: 027 Priority Date: 040109
                                                                                           TO BE FIXED INFORMATION...
                                                                                                Problem type[*]: source code
     High Priority: 027 Mode [*]: OPS
                                                                                                Recommended change[*]: source code
     Trouble Ticket: SMC000000006367
                                                                                                Implement Due Date (yymmdd):
     DAAC Trouble Ticket: NSC00000001101
                                                                                                Eng SW Release Name: TBD
     Submitter: cathyf
                                                                                                Eng SW Release Date (yymmdd):
                                                                                               Quality of NCR: 4
Workaround Available? Y
 ANALYSIS INFORMATION...
     Evaluate Engineer: kcarr
     Assigned To: cduma
     Analysis Due Date(yymmdd): 040109
                                                                                                                                                            Page 1/2
```

NCR Class: OPERATIONS Project: OPS\_DPool

```
MERGE INFORMATION..
                                                 VERIFICATION INFORMATION...
  Resolution[*]: source code
                                                    Test Engineer: sfrank
  Resolved by: cduma
                                                    Verification Due:
  Iteration: Drop 6A.08+
Indicate_SLOC[*]: Combination
Num_SLOC: 20
Fixing time (hrs): 2
Affect CSCI: DPL
                                                    Verification results(P/F)?: P
Elapsed verification time (hrs): 1
                                                   Attachments (Y/N)? N
Ver. Build ID[*]: Drop 6A.08+
Verification Machine: N/A
  Merge Build Id:
                                                    Verification Site[*]: NSIDC DAAC
  Documentation affected (Y/N)? N
                                                 CLOSING INFORMATION.
                                                    Closing Reason[*]: Fixed
  Fix Date (yymmdd): 040105
  Patch Release Name: TBD
                                                    CCR#/NCR#: None
  Patch Release Date (yymmdd):
TE SW Release Name: TE_6A.08_DPL.04
TE SW Release Date (yymmdd): 040112
                                                    Closing accepted by: srice
                                                                                     Page 2/2
Long Description:
We have a test data set that has been reversioned to 196. We're trying
to populate the data pool with this data set but it will not go in. The
error produced is:
[12.31.2003 15:07:36.895][1370] EcDlInsertUtility ****Ingest process
shutting down Status: RETRY Detail: warehouse tables insert failure [
DΊ
EcsScienceGranule.saveToDplDatabase: could not populate warehouse tables: Resolve operation failed: Value out of range. Value:"196"
Radix:10 1
IMPACT:
         Impacts part of our BMGT/ECHO testing.
ocoates 01/05/04 13:40:26
Copy of ticket sent to Kathy Carr for review. ocoates 01/06/04 08:46:15
Subject: Re: 6367
Date: Mon, 05 Jan 2004 14:24:59 -0500
From: Kathy Carr <kcarr@eos.east.hitc.com>
To: ocoates@eos.east.hitc.com
We are in the process of investigating - we have already gotten some
database input from Cathy Fowler, and are now requesting log files.
Will keep you posted.
Thanks.
Kathy
ocoates 01/06/04 11:18:19
Ticket deferred - Wed., 1/7/04 - Kathy has requested logfiles.
<< end of description >>
SUBMITTER INFO:
Submitter Name: Cathy Fowler
Submitter Email: cathyf@kryos.colorado.edu
Submitter Phone: 303-492-3397
```

\*\*\*\*\*\* Analysis (Added 040108 by cduma) \*\*\*\*\*\*\* The VersionId is stored as a Java Byte type in the warehouse code - all java types are signed - so the valid version IDs go from -128 to +127 \*\*\*\*\*\* Workaround (Added 040108 by cduma) \*\*\*\*\*\*\* Please describe the workaround to the problem: The test granule they we retrying to insert was version 196 - they can create a new ESDT with a version number under 127. \*\*\*\*\*\* Resolution (Added 040112 by cduma) \*\*\*\*\*\*\* The type of the VersionId in the DW code was changed to String and converted to int on the way in the DW. \*\*\*\*\*\* Previous Merge Build IDs (Added 040112 by cduma) \*\*\*\*\*\*\*\* Please enter any related Merge Build ID(s) information: 1) M040108010 2) M040108007 3) M040108009 \*\*\*\*\*\*\* Verification (Added 040122 by sfrank) \*\*\*\*\*\*\* Please describe your verification: Resolved by TE\_6A.08\_DPL.04. \*\*\*\*\*\* Closure (Added 040126 by srice) \*\*\*\*\*\*\* Describe the Reason for closing this NCR? Close per review in PRB Meeting on 01/14/04. \*\*\*\*\*\* History \*\*\*\*\*\*\* 1010629 000000 Submitted by Remedy via ddts@eos.hitc.com 040106 160220 Enclosure "Problem" edited by ocoates 040107 105919 N -> A (Assign-Eval to cduma) by kcarr 040108 131924 Enclosure "Analysis" added by cduma 040108 131924 A -> B (Cost-Analyzed) by cduma 040108 132140 Enclosure "Workaround" added by cduma xddts xddts xddts

xddts xddts

```
xddts 040108 132140 B -> R (Assign-Implement) by cduma batchbug 040108 202140 Priority changed to 50 by ddts xddts 040108 212612 Fields modified by dstepp xddts 040112 113809 Enclosure Resolution added by cduma xddts 040112 113902 Enclosure Previous Merge Build IDs added by cduma xddts 040112 113902 R -> M (Merged) by cduma xddts 040112 120131 M -> T (In-Test) by cduma xddts 040113 093129 Fields modified by ocoates xddts 040115 112532 Fields modified by cduma xddts 040115 112532 Fields modified by cduma xddts 040115 112545 Fields modified by cduma webddts 040122 141124 Enclosure "Verification" added by sfrank webddts 040122 141125 T -> V (Verified) by sfrank xddts 040126 163822 Fields modified by srice xddts 040126 163852 Enclosure "Closure" added by srice xddts 040126 163852 V -> C (Closed) by srice
                                                                        04-0092_ncrs
П
 ***************
NCR ID: ECSed39027
                                                      Status: VERIFIED
                                                                                                                        Submitted: 040108
NCR Class: OPERATIONS
                                                     Project: OPS_Toolkit
                                                                                                                        Enclosures: 6
NCR TITLE...
     apply GCTP library change for every platform
PROBLEM INFORMATION...
                                                                                    COST ANALYSIS INFORMATION...
    Build Name[*]: Drop 6A

Test Site[*]: EDF

Detection Method[*]: Analysis

Detected-In-Phase[*]: Code Inspection
                                                                                        Cost[*]: LOW
Estimated Fix Time(hrs): 12
Estimated Fix Date(yymmdd): 040114
                                                                                        Est Num_SLOC: 0
                                                                                        Revised Fix Time (Hrs): 12
Revised Fix Date (yymmdd): 040114
     Test Case ID:
    Machine Name:
    Severity (1=Showstopper)[*]: 2
Priority: 000 Priority Date:
High Priority: 000 Mode [*]: OPS
                                                                                    TO BE FIXED INFORMATION...
                                                                                        Problem type[*]: builds
                                                                                        Recommended change[*]: process
Implement Due Date (yymmdd):
Eng SW Release Name: TBD
Eng SW Release Date (yymmdd):
    Trouble Ticket:
DAAC Trouble Ticket:
Submitter: sni
ANALYSIS INFORMATION...
                                                                                        Quality of NCR: 3
     Evaluate Engineer: kcarr
                                                                                        Workaround Available? N
    Assigned To: sni
    Analysis Due Date(yymmdd):
                                                                                                                                                Page 1/2
NCR Class: OPERATIONS Project: OPS_Toolkit
                                                                                                                        Forwarded 040112
MERGE INFORMATION..
                                                                                    VERIFICATION INFORMATION...
    Resolution[*]: process
Resolved by: sni
                                                                                        Test Engineer: sni
Verification Due:
                                                                                        Verification results(P/F)?: P Elapsed verification time (hrs): 4
     Iteration: Drop 6A
    Indicate_SLOC[*]: Not Applicable
                                                                                        Attachments (Y/N)? N
Ver. Build ID[*]: Drop 6A
    Num_SLOC: 0
    Fixing time (hrs): 12
Affect CSCI: TOOLKIT
Merge Build Id: M040112001
Documentation affected (Y/N)? N
                                                                                        Verification Machine: solara
Verification Site[*]: EDF
    Fix Date (yymmdd): 040113
Patch Release Name: TBD
     Patch Release Date (yymmdd):
    TE SW Release Name: TBD
```

```
04-0092_ncrs
  TE SW Release Date (yymmdd):
FORWARDING INFORMATION...
  Old class: REL_BO_INFORMAL
  Old project: RelBO_Toolkit
  Forwarded by: Kathleen Carr
****** Problem (Added 040108 by sni) *******
PROBLEM DESCRIPTION....
I had changed GCTP library source code per NCR ECSed38771.
Toolkit should apply this change to hdfeos, and hdfeos5 in order to
coordinate the GCTP for every platform that toolkit support.
******* Impact (Added 040108 by sni) *******
IMPACT....
****** Analysis (Added 040112 by sni) *******
Please describe your Analysis:
The gctp change need to merge into /ecs/hdfeos/lib/tmp/ and /ecs/hdfeos5/lib/tmp/
****** Resolution (Added 040114 by sni) *******
Please describe your resolution to this problem:
.a files inside /ecs/hdfeos/lib/tmp/ and /ecs/hdfeos5/lib/tmp/ had been
re-built in following OS:
dec,
hp11.
sgi64.
sun5.8,
hp,
ibm,
linux,
sgi32
The files had merged into both relB, and 6A08 baselines.
Sharon Ni
****** Previous Merge Build IDs (Added 040114 by sni) *******
Please enter any related Merge Build ID(s) information:
1)M040112001
```

```
04-0092_ncrs
2)M040112002
3)
4)
****** Verification (Added 040129 by sni) *******
Please describe your verification:
The lib .a been verified with in newly created views (relB, 6A08).
Different .a lib were merged OK.
040112 093055 Forwarded from RelBO_Toolkit to OPS_Toolkit by kcarr 040112 110848 Enclosure "Analysis" added by sni
xddts
xddts
            040112 110848 Enclosure Analysis added by sni
040112 110848 A -> B (Cost-Analyzed) by sni
040112 111147 B -> R (Assign-Implement) by sni
040114 100313 Enclosure Resolution added by sni
040114 100407 Enclosure Previous Merge Build IDs added by sni
040114 100407 R -> M (Merged) by sni
040129 144630 M -> T (In-Test) by sni
040129 145030 Enclosure "Verification" added by sni
xddts
xddts
xddts
xddts
xddts
xddts
xddts
             040129 145030 T -> V (Verified) by sni
xddts
*************************
NCR ID: ECSed39183
                                       Status: VERIFIED
                                                                                       Submitted: 040119
                                       Project: OPS_DPool
                                                                                       Enclosures: 6
NCR Class: OPERATIONS
NCR TITLE...
   WebAccess: 'GeoTiff No Reprojection' option for HEG convers. ASTER swath
PROBLEM INFORMATION...
                                                             COST ANALYSIS INFORMATION...
  Build Name[*]: Drop 6A.08+
Test Site[*]: EDC DAAC
                                                                Cost[*]: LOW
                                                                Estimated Fix Time(hrs): 9
  Detection Method[*]: Customer Use Detected-In-Phase[*]: DAAC Activity
                                                                Estimated Fix Date(yymmdd): 040123
                                                                Est Num_SLOC: 30
                                                                Revised Fix Time (Hrs): 9
Revised Fix Date (yymmdd): 040126
   Test Case ID: n/a
   Machine Name: n/a
                                                            TO BE FIXED INFORMATION...

Problem type[*]: source code

Recommended change[*]: source code

Implement Due Date (yymmdd): 040123

Eng SW Release Name: 6A08
  Severity (1=Showstopper)[*]: 5
Priority: 009 Priority Date: 200401
High Priority: 009 Mode [*]: TS1
   Trouble Ticket: n/a
   DAAC Trouble Ticket: n/a
```

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Eng SW Release Date (yymmdd): 040123

Quality of NCR: 4

Submitter:

ANALYSIS INFORMATION...

kcarr

Evaluate Engineer: kcarr

Workaround Available? N

Assigned To: yli

Analysis Due Date(yymmdd): 040123

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NCR Class: OPERATIONS Project: OPS\_DPool

MERGE INFORMATION..

Resolution[\*]: source code

Resolved by: yli

Iteration: Drop 6A.08 Indicate\_SLOC[\*]: Added

Num\_SLOC: 37

Fixing time (hrs): 9
Affect CSCI: N/A
Merge Build Id: M040121001

Documentation affected (Y/N)? N

Fix Date (yymmdd): 040122

Patch Release Name: TBD

Patch Release Date (yymmdd): TE SW Release Name: TBD

TE SW Release Date (yymmdd):

VERIFICATION INFORMATION... Test Engineer: yli

Verification Due: 040209 Verification results(P/F)?: P

Elapsed verification time (hrs): 1

Attachments (Y/N)? N Ver. Build ID[\*]: Drop 6A.08+ Verification Machine: f3ins01 Verification Site[\*]: EDF

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\*\*\*\*\*\* Problem (Added 040119 by kcarr) \*\*\*\*\*\*\* Please describe the problem you are experiencing below, including what you did, what you expected to happen, and what actually happened:

In order to implement OPS\_HEG Sev 5 NCR 38651 (change formats for HDF to GeoTiff w/o projection conversion), the Web Access GUI needs to be changed to allow the user to specify a 'GeoTiff No Reprojection' option. This option should be displayed for ASTER swath data only.

The 6A08 solution is to add the 'GeoTiff No Reprojection' option to the WebAccess pull down menu, only for ASTER swath data sets.

\*\*\*\*\*\* Analysis (Added 040121 by yli) \*\*\*\*\*\*\* The fix requires the changes in templates convoption.vm and java src: CartOrderImpl.java. Aster Swath will be treated as a special case when web access gui displays the projection options. Inside the shopping cart, if the order is a mixture of Aster Swath and other grid type, only the common projections will be displayed.

\*\*\*\*\*\*\* IPT (Added 040123 by kcarr) \*\*\*\*\*\*\* 1/23/04: This NCR is the Data Pool GUI companion of HEG NCR 38651.

\*\*\*\*\*\* Resolution (Modified 040205 by kcarr) \*\*\*\*\*\* Please describe your resolution to this problem:

1. Retrieve information from CartOrderImpl.java: 1)whether an order consists swath data or grid data or both Page 26

2) whether an order consists ASTER ESDT only

In convOption.vm, based on the information from 1, make sure that:

- 2. For all swath type, the available conversion options include:

  1) HDF-EOS No Reprojection (Previously HDF-EOS No Change) (NOTE: was later changed to "No Change (HDF-EOS No Reprojection)".
- 2) HDF-EOS Geographic 3) GeoTIFF Geographic
- 3. In addition, "GeoTIFF No Reprojection" is added for ASTER Swath granule only and for an order consists solely ASTER Swath granules.

\*\*\*\*\*\* Previous Merge Build IDs (Added 040127 by yli) \*\*\*\*\*\*\* Please enter any related Merge Build ID(s) information:

- 1)
- 2)
- 3)
- 4)

\*\*\*\*\*\* \*\*\* Verification (Added 040209 by jcorbett) \*\*\*\*\*\*\*\* Please describe your verification:

DEVO4 mode. When converting AST\_L1B the correct four choices are available. No reprojection choices abset for MODIS and MISR data.

```
****** History *******
                  040119 143037 Submitted to OPS_DPool by kcarr 040119 143423 Enclosure "Problem" added by kcarr
xddts
xddts
                 040119 143442 N -> A (Assign-Eval to yli) by kcarr 040121 092204 Enclosure "Analysis" added by yli
xddts
webddts
webddts 040121 092343 A -> B (Cost-Analyzed) by yli webddts 040121 092612 B -> R (Assign-Implement) by yli batchbug 040122 205128 Priority changed to 10 by ddts xddts 040123 114244 Fields modified by kcarr xddts 040123 114454 Enclosure "IPT" added by kcarr
                 040127 125644 Enclosure Resolution added by yli 040127 125644 Enclosure Previous Merge Build IDs added by yli
webddts
webddts
webddts 040127 125645 R -> M (Merged) by yli
batchbug 040129 204525 Priority changed to 9 by ddts
xddts 040205 095618 Enclosure "Resolution" edited
webddts 040209 094648 M -> T (In-Test) by yli
                                                                                           edited by kcarr
                 040209 095151 Enclosure "Verification" added by jcorbett
webddts
webddts 040209 095152 T -> V (Verified) by jcorbett
```

\*

NCR ID: ECSed39381 Status: VERIFIED Submitted: 031031
NCR Class: OPERATIONS Project: OPS\_HEG Enclosures: 5

NCR TITLE...
AST\_L1B 3B band fails to convert for GeoTiff No Reprojection

PROBLEM INFORMATION... COST ANALYSIS INFORMATION... Build Name[\*]: Drop 6A.08

Test Site[\*]: EDC DAAC

Detection Method[\*]: Engineering Test

Detected-In-Phase[\*]: Unit Test Cost[\*]: MEDIUM Estimated Fix Time(hrs): 16 Estimated Fix Date(yymmdd): 040204 Est Num\_SLOC: 100 Revised Fix Time (Hrs): 16 Test Case ID: n/a Revised Fix Date (yymmdd): 040204 Machine Name: n/a Severity (1=Showstopper)[\*]: 2 Priority: 008 Priority Date: 200311 TO BE FIXED INFORMATION... Problem type[\*]: source code High Priority: 008 Mode [\*]: Other Trouble Ticket: n/a DAAC Trouble Ticket: n/a Submitter: evans Recommended change[\*]: source code
Implement Due Date (yymmdd): 040204
Eng SW Release Name: TBD
Eng SW Release Date (yymmdd):
Quality of NCR: 3 ANALYSIS INFORMATION... Workaround Available? N Evaluate Engineer: kcarr Assigned To: cpradera

Analysis Due Date(yymmdd): 020204 Page 1/2

NCR Class: OPERATIONS Project: OPS\_HEG

TE SW Release Date (yymmdd):

MERGE INFORMATION.. VERIFICATION INFORMATION... Test Engineer: cpradera Verification Due: Resolution[\*]: source code Resolved by: cpradera Verification results(P/F)?: P Elapsed verification time (hrs): 1 Iteration: Drop 6A.08 Indicate\_SLOC[\*]: Added Num\_SLOC: 1039 Attachments (Y/N)? N Fixing time (hrs): 120
Affect CSCI: HEG
Merge Build Id: M040127007
Documentation affected (Y/N)? N Ver. Build ID[\*]: Drop 6A.08+ Verification Machine: f3ins01 Verification Site[\*]: EDF Fix Date (yymmdd): 040127 Patch Release Name: TBD Patch Release Date (yymmdd): TE SW Release Name: TBD

\*\*\*\*\*\*\*\* Problem (Modified 040204 by kcarr) \*\*\*\*\*\*\*\*\*
While testing the proposed new ASTER GeoTiff No Reprojection product being created for NCR 38651, EDC found that the AST\_L1B 3B band fails to convert to GeoTiff. (Testing of the product in house had been with AST\_EXP, which does not have a 3B band.)

\*\*\*\*\*\*\* Resolution (Added 040205 by cpradera) \*\*\*\*\*\*\*\*\*
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Please describe your resolution to this problem:

The 3B band had an offset different than the other fields. Code was modified to account for this.

\*\*\*\*\*\*\* Previous Merge Build IDs (Added 040205 by cpradera) \*\*\*\*\*\*\*\*
Please enter any related Merge Build ID(s) information:

- 1)M040204005
- 2)M040204006
- 3)
- 4)

\*\*\*\*\*\*\* IPT (Modified 040209 by jsmith-c) \*\*\*\*\*\*\* 2/9/04 The 3B band had an offset different than the other fields. Code was modified to account for this.

\*\*\*\*\*\* Verification (Added 040209 by jcorbett) \*\*\*\*\*\*\*\*
Please describe your verification:

DEV04 run #123 ran to completion using AST\_L1B granule for GEotiff Geographic projection.

```
xddts 031212 185407 Enclosure "Analysis" added by cpradera xddts 031212 185407 A -> B (Cost-Analyzed) by cpradera xddts 031212 185501 Enclosure "IPT" edited by cpradera xddts 031213 170911 Enclosure "IPT" edited by jsmith-c batchbug 031216 151812 Priority changed to 24 by ddts xddts 040108 132133 Fields modified by kcarr
xddts 040108 132133 Fields modified by kcarr
batchbug 040108 201442 Priority changed to 14 by ddts
batchbug 040115 204140 Priority changed to 12 by ddts
xddts 040116 122541 Enclosure "IPT" edited by kcarr
xddts 040116 133021 Enclosure "IPT" edited by kcarr
batchbug 040122 205117 Priority changed to 9 by ddts
xddts 040123 114120 Fields modified by kcarr
xddts 040123 115312 Enclosure "IPT" edited by kcarr
xddts 040123 115312 Enclosure "IPT" edited by kcarr
xddts 040127 162501 B -> R (Assign-Implement) by cpradera
xddts 040128 104220 Enclosure "IPT—HISTORY"' added by jsmith-c
xddts 040128 104430 Enclosure "IPT" edited by jsmith-c
xddts 040128 125842 Enclosure Resolution added by cpradera
xddts 040128 125908 Enclosure Previous Merge Build IDs added by cpradera
xddts 040128 125909 R -> M (Merged) by cpradera
batchbug 040129 204510 Priority changed to 8 by ddts
xddts 040204 123529 Enclosure "IPT" edited by jsmith-c
xddts 040204 110814 Cloned from ECSed38651 (OPS_HEG) by jsmith-c
xddts 040204 110814 Fields modified by kcarr
xddts 040204 112820 Fields modified by kcarr
xddts 040204 112820 Fields modified by kcarr
                               040204 112902 M -> R (Assign-Implement) by kcarr
040204 131535 Enclosure "Previous Merge Build IDs" deleted by kcarr
  xddts
                            040204 131535 Enclosure "Previous Merge Build IDs" deleted by kcarr 040204 131543 Enclosure "Resolution" deleted by kcarr 040204 131548 Enclosure "IPT_HISTORY\" deleted by kcarr 040204 131552 Enclosure "Analysis" deleted by kcarr 040204 131558 Enclosure "IPT" deleted by kcarr 040204 131601 Enclosure "Initial Analysis" deleted by kcarr 040204 131804 Enclosure "Problem" edited by kcarr 040204 170517 R -> R (Assign-Implement) by cpradera 040205 133627 Enclosure Resolution added by cpradera 040205 133650 Enclosure Previous Merge Build IDs added by cpradera 040205 133650 R -> M (Merged) by cpradera 040209 095648 Enclosure "IPT" added by jsmith-c 040209 100848 Enclosure "IPT" edited by jsmith-c 040209 100931 Enclosure "IPT" edited by jsmith-c 040209 105045 M -> T (In-Test) by cpradera 040209 110056 Enclosure "Verification" added by jcorbett 040209 110057 T -> V (Verified) by jcorbett
  xddts
  webddts
  webddts 040209 110057 T -> V (Verified) by jcorbett
  **************************
                                                                                                                                                                                                        Submitted: 040204
  NCR ID: ECSed39385
                                                                                          Status: VERIFIED
  NCR Class: OPERATIONS
                                                                                          Project: OPS_HEG
                                                                                                                                                                                                        Enclosures: 6
  NCR TITLE..
        ASTER TIF No Reprojection Meter Difference in TIF and the HDF-EOS images
  PROBLEM INFORMATION...
                                                                                                                                            COST ANALYSIS INFORMATION...
       Build Name[*]: Drop 6A.08+

Test Site[*]: EDC DAAC

Detection Method[*]: Engineering Test
                                                                                                                                                   Cost[*]: LOW
                                                                                                                                                   Estimated Fix Time(hrs): 16
                                                                                                                                                   Estimated Fix Date(yymmdd): 040204
        Detected-In-Phase[*]: Unit Test
                                                                                                                                                   Est Num_SLOC: 0
        Test Case ID: n/a
                                                                                                                                                   Revised Fix Time (Hrs): 16
                                                                                                                                 Page 30
```

Machine Name: n/a Severity (1=Showstopper)[\*]: 2 Priority: 018 Priority Date: 200402 High Priority: 018 Mode [\*]: Other Trouble Ticket: n/a
DAAC Trouble Ticket: n/a Submitter: kcarr

ANALYSIS INFORMATION... Evaluate Engineer: kcarr Assigned To: cpradera

Analysis Due Date(yymmdd): 040204

Revised Fix Date (yymmdd): 040204 TO BE FIXED INFORMATION... Problem type[\*]: source code Recommended change[\*]: source code Implement Due Date (yymmdd): 040204
Eng SW Release Name: TBD Eng SW Release Date (yymmdd): Quality of NCR: 1 Workaround Available? N

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NCR Class: OPERATIONS Project: OPS\_HEG

MERGE INFORMATION.. Resolution[\*]: source code

Resolved by: cpradera Iteration: Drop 6A.08 Indicate\_SLOC[\*]: Added

Num\_SLOC: 21

Fixing time (hrs): 16
Affect CSCI: HEG
Merge Build Id: M040204005
Documentation affected (Y/N)? N Fix Date (yymmdd): 040204

Patch Release Name: TBD Patch Release Date (yymmdd): TE SW Release Name: TBD TE SW Release Date (yymmdd):

VERIFICATION INFORMATION... Test Engineer: cpradera Verification Due: Verification results(P/F)?: P Elapsed verification time (hrs): 1 Attachments (Y/N)? N

Ver. Build ID[\*]: Drop 6A.08+ Verification Machine: f3ins01 Verification Site[\*]: EDF

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\*\*\*\*\*\* Problem (Added 040204 by kcarr) \*\*\*\*\*\*\* Please describe the problem you are experiencing below, including what you did, what you expected to happen, and what actually happened:

When testing the ASTER GeoTiff No Reprojection product being produced as part of NCR 38651, EDC found a difference in the meter location of the same pixel in the TIF and the HDF-EOS images.

Also noted that pixel size varies for the X and Y within a scene, and all scenes have different values.

\*\*\*\*\* Analysis (Added 040204 by cpradera) \*\*\*\*\*\* Please describe your Analysis:

Pixel meter locations are off by a few meters.

\*\*\*\*\*\* Resolution (Added 040205 by cpradera) \*\*\*\*\*\*\* Please describe your resolution to this problem:

Pixel meters were rounded off to the nearest integer when working with ASTER Swath.

\*\*\*\*\*\* Previous Merge Build IDs (Added 040205 by cpradera) \*\*\*\*\*\*\*\*

```
Please enter any related Merge Build ID(s) information:
1)M040204005
2)M040204006
3)
4)
******* IPT (Modified 040209 by jsmith-c) *********
2/9/04 Pixel meter locations are off by a few meters. Pixel meters were
rounded off to the nearest integer when working with ASTER Swath.
****** Verification (Added 040209 by jcorbett) *******
Please describe your verification:
DEVO4. Points in both the input hdf file and output tif files were
examined. Minimal shifting was noted in ENVI.
******* History ********
                  040204 131255 Submitted to OPS_HEG by kcarr
040204 131439 Enclosure "Problem" added by kcarr
040204 131455 N -> A (Assign-Eval to cpradera) by kcarr
040204 170734 Enclosure "Analysis" added by cpradera
xddts
xddts
xddts
xddts
                  040204 170734 A -> B (Cost-Analyzed) by cpradera 040204 171054 B -> R (Assign-Implement) by cpradera
xddts
xddts
xddts    040204 1/1054 B -> R (Assign-Implement) by cpradera
batchbug    040204 184011 Priority changed to 18 by ddts
xddts    040205 133832 Enclosure Resolution added by cpradera
xddts    040205 133849 Enclosure Previous Merge Build IDs added by cpradera
xddts    040205 133849 R -> M (Merged) by cpradera
xddts    040209 095858 Enclosure "IPT" added by jsmith-c
xddts    040209 100004 Enclosure "IPT" edited by jsmith-c
xddts    040209 100317 Fields modified by jsmith-c
xddts    040209 100402 Fields modified by jsmith-c
xddts    040209 105120 M -> T (In-Test) by cpradera
webddts    040209 184128 Enclosure "Verification" added by icorbett
                 040209 184128 Enclosure "Verification" added by jcorbett
webddts
webddts 040209 184128 T -> V (Verified) by jcorbett
```

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Submitted: 040204 NCR ID: ECSed39386 Status: VERIFIED NCR Class: OPERATIONS Project: OPS\_HEG Enclosures: 6 Converter cores for ASTER swath HDF-EOS No Reprojection with subsetting PROBLEM INFORMATION... COST ANALYSIS INFORMATION... Build Name[\*]: Drop 6A.08+ Cost[\*]: LOW Test Site[\*]: EDF Estimated Fix Time(hrs): 16 Detection Method[\*]: Regression Test Estimated Fix Date(yymmdd): 040204 Detected-In-Phase[\*]: Acceptance Testing Est Num\_SLOC: 0 Test Case ID: n/a Revised Fix Time (Hrs): 16 Machine Name: n/a Severity (1=Showstopper)[\*]: 2 Priority: 022 Priority Date: 200402 High Priority: 022 Mode [\*]: DEV04 Revised Fix Date (yymmdd): 040204 TO BE FIXED INFORMATION... Problem type[\*]: source code
Recommended change[\*]: source code Implement Due Date (yymmdd): 040204 Trouble Ticket: n/a DAAC Trouble Ticket: n/a Eng SW Release Name: TBD kcarr Eng SW Release Date (yymmdd): Submitter: ANALYSIS INFORMATION... Quality of NCR: 1 Workaround Available? N Evaluate Engineer: kcarr Assigned To: cpradera Analysis Due Date(yymmdd): 040204 Page 1/2 NCR Class: OPERATIONS Project: OPS\_HEG MERGE INFORMATION.. VERIFICATION INFORMATION... Test Engineer: cpradera Resolution[\*]: source code Resolved by: cpradera Verification Due: Iteration: Drop 6A.08
Indicate\_SLOC[\*]: Added
Num\_SLOC: 21 Verification results(P/F)?: P Elapsed verification time (hrs): 1 Attachments (Y/N)? N Ver. Build ID[\*]: Drop 7 Verification Machine: f3ins01 Fixing time (hrs): 16 Affect CSCI: HEG Merge Build Id: Verification Site[\*]: EDF Documentation affected (Y/N)? N Fix Date (yymmdd): 040205 Patch Release Name: TBD
Patch Release Date (yymmdd):
TE SW Release Name: TBD TE SW Release Date (yymmdd):

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\*\*\*\*\*\*\* Problem (Added 040204 by kcarr) \*\*\*\*\*\*\*\*
Please describe the problem you are experiencing below, including what you did, what you expected to happen, and what actually happened:

When performing regression testing for NCR 38651 for delivery of Patch\_6A08\_DPL\_HEG.03A, entered the following ASTER swath request via Web Access GUI: spatial subsetting with Format/Projection = HDF-EOS No Reprojection.

"HDF-EOS No Reprojection" is a new GUI option for this patch - it replaces and is equivalent to the previous "No conversion" option.

Also added for this patch are two new parameters passed from the HEG front end to the converters: OUTPUT\_PROJECTION\_TYPE and OUTPUT\_TYPE.

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For this query, the front end passed OUTPUT\_PROJECTION\_TYPE = NO REPROJECTION, and OUTPUT\_TYPE = HDF-EOS.

Prior to this patch, if the user chose "No conversion" with spatial subsetting for ASTER swath data, the converter would assume an output projection type of Geographic, and an output type of HDF-EOS.

\*\*\*\*\* Analysis (Added 040204 by cpradera) \*\*\*\*\*\* Please describe your Analysis:

swtif should not do no\_reprojection when output is to HDF-EOS.

\*\*\*\*\*\* Resolution (Added 040205 by cpradera) \*\*\*\*\*\*\* Please describe your resolution to this problem:

Code modified so that if output is to HDF-EOS data set, then output projection defaults to Geographic.

\*\*\*\*\*\*\* Previous Merge Build IDs (Added 040205 by cpradera) \*\*\*\*\*\*\* Please enter any related Merge Build ID(s) information:

- 1)M040204005
- 2)M040204006
- 3)
- 4)

\*\*\*\*\*\*\* IPT (Modified 040209 by jsmith-c) \*\*\*\*\*\*\* 2/9/04 Swath Tif should not do no\_reprojection when output is HDF-EOS. Code modified to default to Geographic if output is to HDF-EOS.

\*\*\*\*\*\* Verification (Added 040209 by jcorbett) \*\*\*\*\*\*\*\*
Please describe your verification:

Ran in DEV04 with AST\_L1B. Converted to Geotiff no reprojection and subsetted without coring.

\*\*\*\*\*\*\* History \*\*\*\*\*\*\*\*

040204 132150 Submitted to OPS\_HEG by kcarr 040204 133156 Enclosure "Problem" added by kcarr xddts Page 34

# 04-0092\_ncrs 040204 133208 N -> A (Assign-Eval to cpradera) by kcarr 040204 170900 Enclosure "Analysis" added by cpradera xddts xddts xddts 040204 170900 A -> B (Cost-Analyzed) by cpradera xddts 040204 171126 B -> R (Assign-Implement) by cpradera batchbug 040204 184104 Priority changed to 22 by ddts xddts 040205 134014 Enclosure Resolution added by cpradera xddts 040205 134014 Enclosure Resolution added by cpradera vddts 040205 134029 Enclosure Previous Merge Build IDs added by cpradera xddts 040205 134029 R -> M (Merged) by cpradera xddts 040209 100532 Enclosure "IPT" added by jsmith-c xddts 040209 100648 Enclosure "IPT" edited by jsmith-c xddts 040209 105142 M -> T (In-Test) by cpradera webddts 040209 111621 Enclosure "Verification" added by jcorbett webddts 040209 111621 T -> V (Verified) by jcorbett